

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,168		12/02/2003	Charlotte Moira Norfor Allerton	PC25420A	6748
28523	7590	07/01/2005		EXAMINER	
PFIZER IN	•		GRAZIER, NYEEMAH		
		ENT, MS8260-1611	ART UNIT	PAPER NUMBER	
	EASTERN POINT ROAD GROTON, CT 06340				TALER NOMBER
31.01011,	01 005	.•		1626 DATE MAILED: 07/01/200:	ς.

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/727,168	ALLERTON ET AL.				
Office Action Summary	Examiner	Art Unit				
·	Nyeemah Grazier	1626				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 20 A	ugust 2004.					
·— ·	action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-8 and 10-15 is/are pending in the at 4a) Of the above claim(s) 10-14 is/are withdraw 5) Claim(s) is/are allowed.  6) Claim(s) 1-8 and 15 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or Application Papers  9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acceptable and acceptable acceptable and acceptable and acceptable and acceptable and acceptable acceptable and acceptable and acceptable acceptable and acceptable acceptable acceptable and acceptable accepta	vn from consideration.  or election requirement.  er.  epted or b) □ objected to by the					
Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	tion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority document</li> <li>2. Certified copies of the priority document</li> <li>3. Copies of the certified copies of the priority document</li> <li>application from the International Burea</li> <li>* See the attached detailed Office action for a list</li> </ul>	s have been received. s have been received in Applicat rity documents have been receive u (PCT Rule 17.2(a)).	ion No ed in this National Stage				
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) X Interview Summary Paper No(s)/Mail D	ate				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5/13/04.	6) Other:	Patent Application (PTO-152)				

#### **DETAILED NON-FINAL OFFICE ACTION**

#### I. ACTION SUMMARY

Claims 1-8 and 10-15 are currently pending in the instant application. Claim 9 has been cancelled. Claims 10-14 are withdrawn from further consideration by the Examiner because Claims 10-14 are drawn to a non-elected invention. 37 C.F.R. § 1.142(b).

The instant invention Claim 1 was objected to under § 112, second paragraph on the basis that the claim is self-conflicting.

Further, the instant invention, claims 1-8, and 15 as recited are not identically disclosed in the reference cited by Examiner, however the difference between the instant invention and the prior art renders the instant invention obvious under 35 U.S.C. § 103(a).

Finally, Claim 1-8 and 15 were rejected under 102(b) as being anticipated by Perrone, et al.

#### II. PRIORITY

The instant application claims the benefit of the following U.S. Provisional Applications under 35 U.S.C. § 119(e): 60/438,476, filed on January 7, 2003; 60/470,950, filed on May 15, 2003; and 60/501,512, filed on September 8, 2003. The instant application further claims the benefit of the following Foreign Applications under 35 U.S.C. § 119(a)-(d): UK 0228787.8, filed on December 10, 2002; UK 0308460.5, filed on April 11, 2003; and UK 0313606.6, filed on June 12, 2003. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### III. RESTRICTION REQUIREMENT

Restriction to one of the following inventions is required under 35 U.S.C. § 121:

I. Claims 1-8, and 15, directed to the compounds and compositions of the compounds of formula (I), (Ia) and (Ib), classified in class 544, subclasses 114, 124, and 126.

II. Claims 31 – 59, directed to the method of treatment comprising the administration of the compounds of the invention, classified in class 514, subclass 235.2, 235.5.

Inventions I and II are related as a product and a method of using the product to treat sexual dysfunction, but the inventions are distinct. Where the Applicant claims a product and a process of using the product, the inventions are distinct if either or both of the following can be shown: (1) that the process/method of using the product as claimed can be used with a materially different product or (2) that the product as claimed can be used by another and materially different process or method. (MPEP § 806.05(f)).

In the instant case, Inventions (I) and (II) are distinct because Invention (II), directed to a method of treating sexual dysfunction can be used with a materially different product, such as the

pyrazolopryimidinone compounds. <u>See e.g.</u>, Bunnage, et al. (WO 00/24745) Additionally, the products, phenyl morpholines in particular, have utility for different pharmacological uses, such as 5-HT1 and 5-HT2 serotonergic receptor activity. <u>See e.g.</u>, PERRONE, R. et al. Oxygen Isosteric Derivatives of 3-(3-hydroxyphenyl)-N-n-propylpiperidine, *J. Med. Chem.* **1992**, 35, pp. 3045-3049. Furthermore the inventions have acquired a separate status in the art as shown by their different classifications. Thus, restriction for examination purposes as indicated is proper.

### Advisory of Rejoinder

The Examiner has required restriction between a product and method of use claims.

Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejections are governed by 37 CFR 1.116; amendments submitted after allowances are governed by 37 CFR 1.312.

The following is a recitation of M.P.E.P. 821.04, Rejoinder:

Where product and process claims drawn to independent and distinct inventions are presented in the same application, applicant may be called upon under 35 U.S.C. 121 to elect claims to either the product or process. See MPEP § 806.05(f) and § 806.05(h). The claims to the nonelected invention will be withdrawn from further consideration under 37 CFR 1.142. See MPEP § 809.02(c) and § 821 through § 821.03. However, if applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims, which depend from or otherwise include all the limitations of the allowable product claim will be rejoined.

Where the application as originally filed discloses the product and the process for making and/or using the product, and only claims directed to the product are

Art Unit: 1626

presented for examination, when a product claim is found allowable, applicant may present claims directed to the process of making and/or using the patentable product by way of amendment pursuant to 37 CFR 1.121. In view of the rejoinder procedure, and in order to expedite prosecution, applicants are encouraged to present such process claims, preferably as dependent claims, in the application at an early stage of prosecution. Process claims, which depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance. Amendments submitted after final rejection are governed by 37 CFR 1.116. Process claims which do not depend from or otherwise include the limitations of the patentable product will be withdrawn from consideration, via an election by original presentation (see MPEP § 821.03). Amendments submitted after allowance are governed by 37 CFR 1.312. Process claims which depend from or otherwise include all the limitations of an allowed product claim and which meet the requirements of 35 U.S.C. 101, 102, 103, and 112 may be entered.

Where product and process claims are presented in a single application and that application qualifies under the transitional restriction practice pursuant to 37 CFR 1.129(b), applicant may either: (A) elect the invention to be searched and examined and pay the fee set forth in 37 CFR 1.17(s) and have the additional inventions searched and examined under 37 CFR 1.129(b)(2); or (B) elect the invention to be searched and examined and not pay the additional fee (37 CFR 1.129(b)(3)). Where no additional fee is paid, if the elected invention is directed to the product and the claims directed to the product are subsequently found patentable, process claims which either depend from or include all the limitations of the allowable product will be rejoined. If applicant chooses to pay the fees to have the additional inventions searched and examined pursuant to 37 CFR 1.129(b)(2) even if the product is found allowable, applicant would not be entitled to a refund of the fees paid under 37 CFR 1.129(b) by arguing that the process claims could have been rejoined. 37 CFR 1.26(a) states that "[T]he Commissioner may refund any fee paid by mistake or in excess of that required. A change of purpose after the payment of a fee...will not entitle a party to a refund of such fee..." In this case, the fees paid under 37 CFR 1.129(b) were not paid by mistake nor paid in excess, therefore, applicant would not be entitled to a refund. In the event of rejoinder, the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101,102, 103, and 112. If the application containing the rejoined claims is not in condition for allowance, the subsequent Office action may be made final, or, if the application was already under final rejection, the next Office action may be an advisory action. Form paragraphs 8.42 through 8.44 should be used to notify applicant of the rejoinder of process claims which depend from or otherwise include all the limitations of an allowable product claim.

Application/Control Number: 10/727,168 Page 6

Art Unit: 1626

In the event of rejoinder, the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104 - 1.106. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. If the application containing the rejoined claims is not in condition for allowance, the subsequent Office action may be made final, or, if the application was already under final rejection, the next Office action may be an advisory action.

The following is a recitation from paragraph five, "Guidance on Treatment of Product and Process Claims in light of <u>In re Ochiai</u>, <u>In re Brouwer</u> and 35 U.S.C. §103(b)" (1184 TMOG 86(March 26, 1996)):

"However, in the case of an elected product claim, rejoinder will be permitted when a product claim is found allowable and the withdrawn process claim **depends from or otherwise includes all the limitations of** an allowed product claim. Withdrawn process claims not commensurate in scope with an allowed product claim will not be rejoined." (emphasis added)

Pursuant to M.P.E.P. § 821.04 and In re Ochiai, 71 F.3d 1565, 37 USPQ 1127 (Fed. Cir. 1995), rejoinder of product claims with process claims commensurate in scope with the allowed product claims will occur following a finding that the product claims are allowable. Until, such time, a restriction between product claims and process claims is deemed proper. Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution to maintain either dependency on the product claims or to otherwise include the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder.

#### IV. ELECTION

It should be noted that during a telephone conversation with A. Dean Olson, Esquire on June 20, 2005, a provisional election was made without traverse to prosecute Invention (I), Claims 1-8, and 15. Applicant in replying to this Office action must make affirmation of this election. Claims 10-14 are withdrawn from further consideration by the Examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

#### V. REJECTIONS

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

In the instant application, Claims 1-8 and 15 are rejected under 35 U.S.C. § 102(b) as being anticipated by Perrone, et al. See Perrone, R. et al. Oxygen Isosteric Derivatives of 3-(3-hydroxyphenyl)-N-n-propylpiperidine, *J. Med. Chem.* 1992, 35, pp. 3045-49, 3046 (scheme 1, compound 10k). Perrone, et al. teaches the binding activity of substituted 3-phenylmorpholines on D-2 dopaminergic and 5-HT1 and 5-HT2 serotonergic receptors. Compound (10k) has the

Art Unit: 1626

A is C-X,

B is C-Y,

R1 and R2 are hydrogen atoms,

X is hydrogen,

Y is hydrogen, and

Z is OH.

## Or wherein:

A is C-X,

B is C-Y,

R1 and R2 are hydrogen atoms,

X is OH

Y is hydrogen, and

Z is H.

Notwithstanding the proviso in claim 1, Claim 1-8 and 15, are rejected because said claims have been interpreted as the plain meaning of the first proviso, namely, that "for a compound of formula (I), (Ia), or (Ib), when A is C-X, B is C-Y, R1 is H or (C1-C5)alkyl and R2 is H or (C1-C5)alkyl at least one of X, Y and Z must be OH." (Emphasis added). Furthermore, even if the second proviso, stating that for compound of formula (I), when A is C-X and B is C-Y, Y is H, Z is H R1 is H and R2 is H, then X cannot be OH," is applicable, Claims 1-8 and 15 is still rejected under § 102(b) because the compound is anticipated as variable "Z" is OH making the compound 3-(4-propylmorphin-2-yl) phenol.

#### 35 USC § 112, SECOND PARAGRAPH

Pursuant to 35 U.S.C. § 112, the second paragraph:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention. 35 U.S.C. § 112,  $2^{nd}$  ¶.

Claim 1 is rejected under 35 U.S.C. §112, second paragraph because the claim is ambiguous. Claim 1 recites a proviso that is self conflicting. The proviso states that "for a compound of formula (I), (Ia), or (Ib), when A is C-X, B is C-Y, R1 is H or (C1-C5)alkyl and R2 is H or (C1-C5)alkyl at least one of X, Y and Z must be OH; for compound of formula (I), when A is C-X and B is C-Y, Y is H, Z is H R1 is H and R2 is H, then X cannot be OH." The proviso is conflicting because when (A) and (B) are carbon and (X), (Y), R1 and R2 are H then according to the proviso, Z must be OH. However, the second part of the provision contradicts

Application/Control Number: 10/727,168 Page 10

Art Unit: 1626

the first part of the proviso because when (A) and (B) are carbon and (Y), and (Z) are hydrogen, then X cannot be OH. But the two compounds are structurally identical, thus, the proviso is conflicting.

### 35 USC § 103 REJECTION

The following is a quotation of 35 U.S.C. § 103(a) that forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Graham v. John Deere Co. set forth the factual inquiries necessary to determine obviousness under 35 U.S.C. §103(a). See Graham v. John Deere Co., 383 U.S. 1, 148 USPO 459 (1966). Specifically, the analysis must employ the following factual inquiries:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-8 and 15 are rejected under 35 U.S.C. § 103(a) as being obvious over PERRONE, R. et al. Oxygen Isosteric Derivatives of 3-(3-hydroxyphenyl)-N-n-propylpiperidine, *J. Med. Chem.* **1992**, 35, pp. 3045-49.

Art Unit: 1626

The instant inventions in Claims 1-8 and 15 recites the products of formulae (I), (Ia) and (Ib) which have utility as an agonists selective for dopamine D3 receptors over D2 receptors useful in the treatment of sexual dysfunction of male and females.

### (1) Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

Perrone, et al. teaches the effect of D-2 dopaminergic activity and serotonin receptors 5-HT1 and 5-HT2 with compounds of the formula (1), (2) and (3) in comparison to 3-PPP and 8-OH-DPAH. These serotonin receptor are known to increase libido activity in male and females. See e.g., Hayes, et al. (WO 00/38993).

3045-46.

Compound 10c and 10d are represented by the following structures.

<u>Id.</u> p. 3046.

(2) Ascertainment of the Difference Between the Prior Art and the Claims (MPEP §2141.02)

Art Unit: 1626

The difference between the prior art of Perrone et al. and the instantly claimed compounds is that the <u>Perrone</u> invention, teaches chloro substituted phenylmorpholines at the ortho and meta position, while the instant invention recites a para-chloro substituted phenolmorpholine.

## (3) Finding of Prima Facie Obviousness-The Rational and Motivation (MPEP §2142-2413)

Perrone et al. is comparable to the instant invention because reference teaches the binding affinity of 2-chlorophenyl, 3-chlorophenyl and 3-phenol morpholines. (See Perrone, p. 3046). The motivation to make, for example, 2-(4-chloro-3-methoxyphenyl)-4-propyl-morpholine, is derived from the expectation that structurally similar compounds are generally expected to have similar properties and have similar utilities. In re Gyurik, 596 F. 2d 1012, 201 USPQ 552 (CCPA 1979).

#### VI. OBJECTIONS

#### Objections to the Specifications

Applicant is reminded of the proper language and format for an abstract of the disclosure. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

Art Unit: 1626

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns,"

"The disclosure defined by this invention," "The disclosure describes," etc.

The abstract is objected to for two reasons. First, the abstract is not in compliance with the M.P.E.P. because the abstract contains more than 25 lines. Secondly, the abstract should not be written in the form of a claim, but rather in paragraph form.

## Claim Objections

Claims 1 and 8 are objected to because of the following informalities: Claims 1 and 8 is objected to because the variables within the claims should be separated using a comma or semicolon. Claim 1 does not have a comma after the listed variables for "X" and "Y." Correction is required. Appropriate correction is required.

## **Dependent Claim Objections**

Dependent Claims 2-8 and 15 are also objected to as being dependent upon a rejected based claim. To overcome this objection, Applicant should rewrite said claims in an independent form and include the limitations of the base claim and any intervening claim.

#### VII. CONCLUSION

The instant invention Claim 1 was objected to under § 112, second paragraph on the basis that the claim is self-conflicting. Further, the instant invention, claims 1-8, and 15 as recited are not identically disclosed in the reference cited by Examiner, however the difference between the

instant invention and the prior art renders the instant invention obvious under 35 U.S.C. § 103(a). Finally, Claim 1-8 and 15 were rejected under 102(b) as being anticipated by Perrone, et al. All claims dependent from Claims 2-8 and 15 are therefore rejected to being dependent on a rejected claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nyeemah Grazier whose telephone number is (571) 272-8781. The examiner can normally be reached on Monday through Friday from 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane, can be reached on (571) 272 - 0699. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Very truly yours,

Nyeemah Grazier

Patent Examiner, AU 1626 UNITED STATES PATENT AND TRADEMARK OFFICE 400 Dulany Street

Remsen Building, 5B29

KAMAL A. SAEED, PH.D.
PRIMARY EXAMINER

Joseph K. McKane

Supervisory Primary Examiner, AU 1626

Page 15

Art Unit: 1626

Alexandria, VA **22314-5774** Tel.: (571) 272-8781